FEI | Faith Engineering, Inc.

541 Quantum Road NE
Rio Rancho, New Mexico 87124
(505) 243-5494 • FAX (505) 243-5585
e-mail • faithinc@flash.net

November 21, 2001

Mr. Nolan Bennett
Environmental Health Scientist
Bernalillo County Environmental Health Department
600 Second St. NW, Suite 500
Albuquerque, NM 87102

Sent via e-mail: nbennett@bernco.gov and US Mail

RE: Transmittal of 4th Quarterly Ground Water Sampling Results
701 Isleta SW, The Phil's Auto Site; NMED/USTB Facility ID No. 5517001 / 1537
Contract Control No. 980473

Dear Nolan:

Please find included herewith the report for the fourth quarter of ground water sampling and analysis for the subject site. Ground water sampling was conducted on October 2 and 3, 2001.

This sampling event provides the ground water sampling results with field testing for all 13 ground water monitoring wells in the site vicinity. During this quarter's sampling event, naphthalene plus mono-methyl naphthalenes concentrations above the combined NMWQCC standard of 30 µg/l were found in three monitoring wells, MW-1 (81 µg/l), MW-3 (94 µg/l), and MW-4 (79.3 µg/l). Measurable concentrations of ethyl-benzene, total xylenes, tri-methyl benzenes, and naphthalenes are present in wells MW-1, MW-2, MW-3, and MW-4, although concentrations remain below NMWQCC standards. Benzene concentrations have been non-detectable in all of the site vicinity monitoring wells since sampling was conducted for the initial site investigation in September 2000. Please refer to the Hydrogeologic Investigation Report dated May 15, 2001 for the extent of soil contamination.

FEI is in the process of completing a Tier I/II Risk Based Decision Making (RBDM) evaluation to address the need for further remedial action at the site. Please do not hesitate to contact the undersigned if you have any questions or comments regarding this Sampling Report.

Respectfully submitted,

TECUMSEH PROFESSIONAL ASSOCIATES, INC.

William J. Brown, C.S. #077
Senior Hydrogeologist

FAITH ENGINEERING, INC.

Stuart E. Faith, P.E., C.S. #080
President

cc. w/ encls. Mr. Tom Leck – NMED/USTB

FEI FILE NUMBER 99-01-1183-05

FOURTH QUARTERLY SAMPLING REPORT
PHIL'S AUTO SITE
701 ISLETA BLVD. SW
ALBUQUERQUE, NEW MEXICO
FACILITY #5517001/1537

PREPARED BY:

FAITH ENGINEERING, INC.
541 QUANTUM ROAD NE
RIO RANCHO, NEW MEXICO 87124
(505) 243-5494 • FAX (505) 243-5585

TECUMSEH PROFESSIONAL ASSOCIATES, INC.
5600 WYOMING NE, SUITE 150
ALBUQUERQUE, NM 87109
(505) 293-1156 • FAX (505) 293-1971

NOVEMBER 21, 2001

PREPARED FOR:

THE BERNALILLO COUNTY ENVIRONMENTAL HEALTH DEPARTMENT
AND
THE NEW MEXICO ENVIRONMENT DEPARTMENT
UNDERGROUND STORAGE TANK BUREAU

Table of Contents

List of Figures

List of Tables

List of Appendices

COVER PAGE
FORM 1223
QUARTERLY MONITORING REPORT

Please include the following information:

1. **Site name:** Phil's Auto

2. **Responsible party:** Mr. Nolan Bennett

3. **Responsible party mailing address** *(list contact person if different):*

Bernalillo County Environmental Health Dept.

600 2nd Street NW, Suite 500

Albuquerque, NM 87102

4. **Facility number:** 5517001/1537

5. **Address/legal description:** 701 Isleta Blvd. SW

Albuquerque, NM

6. **Author/consulting company:** Tecumseh Professional Associates, Inc.

7. **Date of report:** 11/21/2001

8. **Date of confirmation of release or date USTB was notified of the release:**

July 1987

STATEMENT OF FAMILIARITY

I, the undersigned, am personally familiar with the information submitted in this report and the attached documents and attest that it is true and complete.

Signature:_____

Name: William J. Brown

Affiliation: Tecumseh Professional Associates, Inc.

Title: Senior Hydrogeologist

Certified Scientist #: 077

Date:_____

I. INTRODUCTION:

I. A. Scope of Work

Faith Engineering, Inc. (FEI), in collaboration with Tecumseh Professional Associates, Inc. (TPA), has been retained by the Bernalillo County Environmental Health Department to provide professional environmental services at the Phil's Auto Site, 701 Isleta SW, Albuquerque, New Mexico (the Site). The location of the Site is shown on Figure 1. This report documents the fourth quarter of ground water sampling conducted at the Site on October 2 and 3, 2001. The period covered in this report is from July 2001 to October 2001.

I. B. This quarter's highlights

This sampling event represents the fourth quarter of ground water quality re-examination as outlined in the work plan approval letter dated December 8, 1999, as amended on March 17, 2000 and again on November 17, 2000. The sampling event provides the sample results with field testing for all 13 ground water monitoring wells in the site vicinity.

II. ACTIVITIES PERFORMED DURING THIS QUARTER:

II. A. Brief description of the remediation system and date installed

In 1994, Intera was retained by NMED/USTB to design and install a remediation system at the Site. Intera submitted a remediation proposal to NMED/USTB in April of 1994 for the installation of a SVVS™ in-situ remediation system. Intera conducted a short-term pilot test on a combination sparge/vent well cluster located in the northern portion of the Site. An in-situ SVVS™ remediation system was installed at the Site in 1995 and began operation in September of 1995. The remediation system consisted of 33 sparge and vent well nests manifolded with underground PVC piping to an above ground treatment unit. Wells were constructed with 2" diameter, schedule 40 PVC with crushed stone surrounding the vent wells and 10/20 silica sand surrounding the sparge wells. Bentonite seals were emplaced to separate screened intervals and the land surface. The above-ground treatment unit consists of a 300 scfm catalytic oxidizer and vent and sparge blowers. The system operated between September 1995 and early 1996, when it was shut down.

II. B. Description of activities performed to keep system operating properly

None. System shut down in 1996.

II. C. Monitoring activities performed

Ground water monitoring and sampling at the Site during this quarter took place on October 2 and 3, 2001. This quarter's sampling included the following:

- *ground water elevation measurements in all wells.*
- *quarterly event ground water sampling of monitor wells MW-A, MW-1, MW-2, MW-3, MW-4, MW-5, MW-9, MW-10, FTW-1, FTW-2, FTW-4, FTW-5 and FTW-6.*
- *laboratory analysis of ground water samples for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX), Methyl-t-Butyl Ether (MTBE), Tri-Methyl Benzenes (TMBs), Ethylene Dibromide (EDB), Ethylene Dichloride (EDC), Naphthalene, 1-Methylnaphthalene and 2-Methylnaphthalene by EPA Method 8260.*
- *field testing for natural attenuation indicators of ground water samples, including iron, phosphate, sulfide, nitrate, alkalinity, pH, dissolved oxygen, conductivity, and temperature.*

The locations of all monitor wells are shown on Figure 1. Monitoring and sampling procedures are described in Appendix 1. Table 4 provides a historical summary of field activities at the Site and Appendix 2 contains this quarter's original field notes. The laboratory results of the ground water analyses for the current monitoring period are shown on Table 1. Historic sampling results for both organic and inorganic compounds are shown on Tables 2a and 2b. Laboratory analytical reports and the Chain-of-Custody Form are provided in Appendix 3.

During this quarter's sampling event, naphthalene plus mono-methyl naphthalenes concentrations above the combined NMWQCC standard of 30 µg/l were found in three monitoring wells, MW-1 (81 µg/l), MW-3 (94 µg/l), and MW-4 (79.3 µg/l). Measurable concentrations of ethyl-benzene, total xylenes, tri-methyl benzenes, and naphthalenes were present in wells MW-1, MW-2, MW-3, and MW-4, although concentrations remain below NMWQCC standards. Benzene concentrations have been non-detectable in all of the site vicinity monitoring wells since sampling was conducted for the initial site investigation in September 2000. A total BTEX summary and naphthalenes contour map for the fourth quarter ground water analysis are shown on Figure 1.

Depth to ground water during this quarter's sampling event varied from 10.68 feet below ground surface (bgs) in MW-9 to 12.47 feet bgs in MW-3. All ground water elevation data including the historical data is summarized in Table 3. This quarter's measurements of on-site ground water elevations indicate a ground water flow direction to the south at a gradient of approximately 0.0005 feet/foot. A water elevation summary and directional flow map for the fourth quarter ground water measurements are shown on Figure 2.

II. D. System performance and effectiveness

Not Applicable, See II. A. and B.

II. E. Statement verifying containment of release

Based on ground water sample results from site perimeter monitor wells and the recently completed Hydrogeologic Investigation, dissolved-phase BTEX levels are below NMWQCC standards and have remained so during the four quarters of sampling conducted by FEI/TPA. Naphthalenes are the only compounds currently exceeding NMWQCC standards at the Site. Examination of historic ground water quality data suggests the dissolved phase hydrocarbon plume is in a state of hydrostatic equilibrium and is not actively migrating. Dissolved phase hydrocarbons in the ground water are within the highway easement to the east of the site outside perimeter monitoring well MW-1. Off-site migration of contaminants with reference to the southern ground water directional flow has likely occurred near monitoring well MW-4 onto the adjoining private property. Please refer to Figure 1. There is no evidence to suggest other off-site, up-gradient sources of contamination for the BTEX concentration levels in MW-1.

III. SUMMARY AND CONCLUSIONS:

III. A. Discussion of trends or changes noted in analytical results or site conditions

BTEX concentrations in ground water have remained below the NMWQCC standards in all monitoring wells since the site's initial sampling event on September 18, 2000. Laboratory results obtained during this fourth quarter sampling event indicate that BTEX concentrations in the ground water are within the highway easement to the east but are below the NMWQCC standards for these compounds. The short historical trend of BTEX and naphthalenes concentrations for monitor wells MW-1, MW-2, and MW-3 indicate that the overall concentration levels, which previously were diminishing in MW-1 and MW-2 and non-detect in MW-3, have increased in the last sampling event. BTEX and naphthalenes concentrations have also continued to increase in well MW-4. Further sampling events should be conducted in order to establish long-term trends of contaminant migration.

III. B. Ongoing assessment of the remediation system

Not Applicable, See II. A. and B.

III. C. Recommendations

FEI/TPA recommend continuing site monitoring and sampling to document plume stability/migration characteristics. FEI is currently in the process of completing a Tier 2 evaluation for the Site to determine

site-specific threshold limits (SSTLs) and whether additional remedial efforts need to be implemented at the Site.

Large House

SUSAN RICKER DRINKING WELL

Ricker Monitor Well (unusable)

ISLETA BLVD.

Yard

House

NASHVILLE STREET

Driveway

Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalenes	<13

FTW-1

Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalenes	<13

MW-A

Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalenes	<13

FTW-2

FTW-6

Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalenes	<13

WORTHEN DRINKING WELL (~200 feet west)

MW-2

Benzene	<1.0
Toluene	<1.0
Ethylbenzene	43
Total Xylenes	44.4
Naphthalenes	26

MW-1

Benzene	<1.0
Toluene	3.7
Ethylbenzene	150
Total Xylenes	354
Naphthalenes	81

Phil's Auto Office

CISNEROS IRRIGATION WELL (~50 feet west)

WORTHEN IRRIGATION WELL (~200 feet west)

>30 ppb naphthalenes

MW-10

well located ~100 feet west

Benzene	<1.0
Toluene	<1.0
Ethylbenzene	4.1
Total Xylenes	<2.0
Naphthalenes	29.6

Shop

Benzene	<1.0
Toluene	<1.0
Ethylbenzene	97
Total Xylenes	196
Naphthalenes	94

Benzene	<1.0
Toluene	<1.0
Ethylbenzene	92
Total Xylenes	184
Naphthalenes	79.3

Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalenes	<13

MW-5

MW-3

MW-4

Abandoned Small Building

Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalenes	<13

MW-9

Old Cars

FTW-4

Benzene	<1.0
Toluene	<1.0
Ethylbenzene	1.8
Total Xylenes	10.8
Naphthalenes	7.6

FTW-5

Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalenes	3.2

Old Cars

Dirt Lot

LEGEND

- Building
- Concrete
- Asphalt
- Fence Line
- Vegetation
- Adobe or Brick Wall
- New 2" Diameter Monitor Well
- Existing Monitor Well Location
- Private Water Supply Well
- Utility Pole
- Manhole

Utility Lines

- ug — Underground Gas Line
- uw — Underground Water Line
- ufbo — Underground Fiber Optics
- oe — Overhead Electric

BTEX and Naphthalenes Concentration Levels and Naphthalenes Plume Configuration

Benzene	<1.0
Toluene	<1.0
Ethylbenzene	1.8
Total Xylenes	10.8
Naphthalenes	7.6

30-100 ppb

N

0 15 30ft

Scale

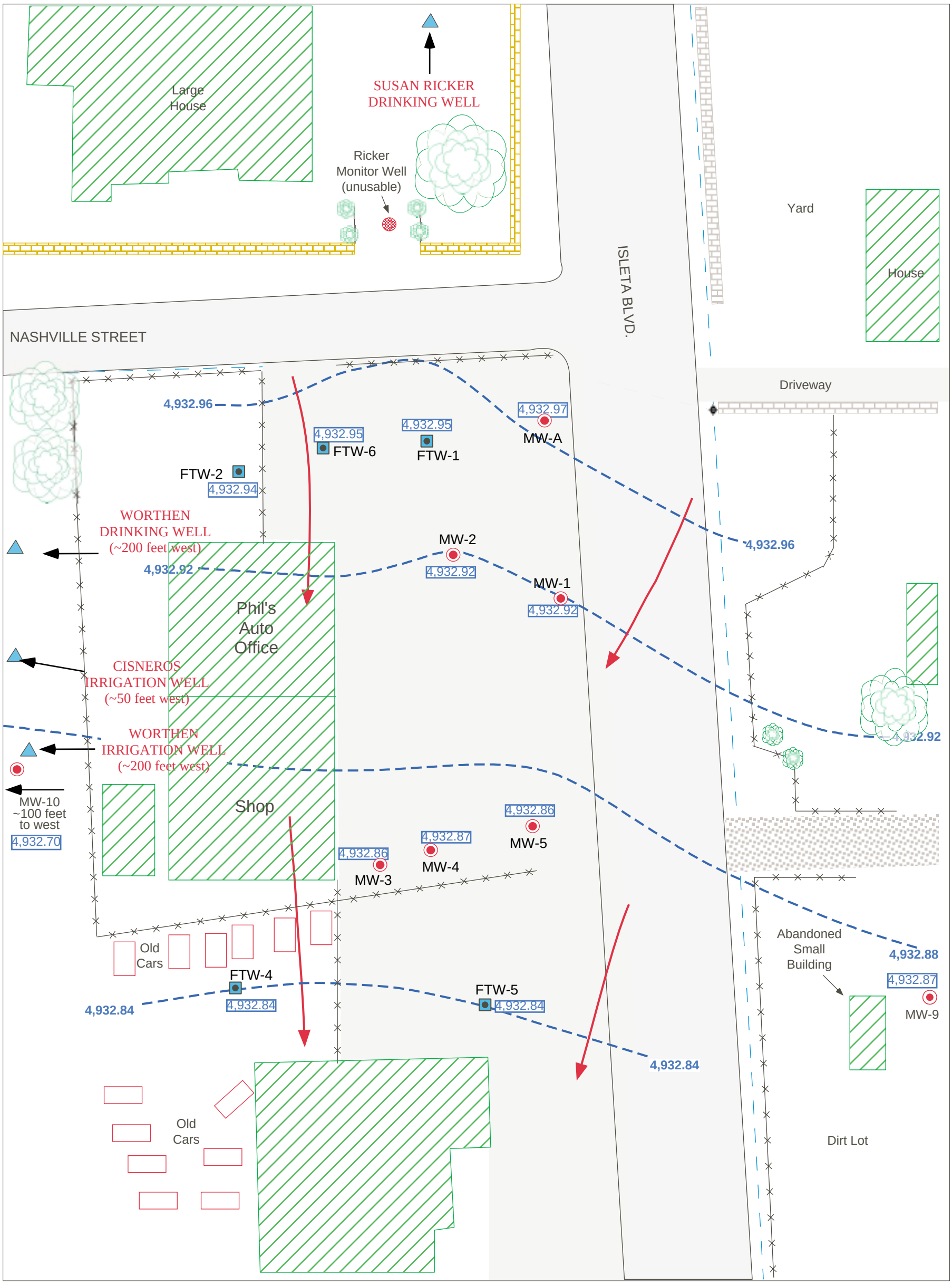
Phil's Auto Site
701 Isleta Blvd. SW
Albuquerque, New Mexico

FEI Faith Engineering, Inc.
541 Quantum Road NE
Rio Rancho, New Mexico 87124-4502
(505) 243-5494 • FAX (505) 243-5585
e-mail • faithinc@flash.net

TECUMSEH Professional Associates, Inc.
5600 Wyoming Blvd. NE, Suite 150
Albuquerque, New Mexico 87109
ph: (505) 293-1156 fax: (505) 293-1971

Subject: Site Map with Groundwater Quality Data and Naphthalenes Isocontours - 10-2/3-01

Drawn by: KGF/WJB/CLS	Client: BCEHD	
Date : November 2001	Figure: 1	Project: 99-01-1187



LEGEND

- Building
- Concrete
- Asphalt
- Fence Line
- Vegetation
- Adobe or Brick Wall
- New 2" Diameter Monitor Well
- Existing Monitor Well Location
- Private Water Supply Well
- Utility Pole
- Manhole

Utility Lines

- ug — Underground Gas Line
- uw — Underground Water Line
- ufbo — Underground Fiber Optics
- oe — Overhead Electric

N

0 15 30ft

Scale

Measured Groundwater Elevation (in feet above MSL)

W-16
4,925.61

Inferred Direction of Groundwater Flow (assumes all wells screened in same aquifer

Calculated Potentiometric Surface (in feet above MSL) 4,925.70

Phil's Auto Site
701 Isleta Blvd. SW
Albuquerque, New Mexico

FEI Faith Engineering, Inc.
541 Quantum Road NE
Rio Rancho, New Mexico 87124-4502
(505) 243-5494 • FAX (505) 243-5585
e-mail • faithinc@flash.net

TECUMSEH
Professional Associates, Inc.
5600 Wyoming Blvd. NE, Suite 150
Albuquerque, New Mexico 87109
ph: (505) 293-1156 fax: (505) 293-1971

Subject: Ground Water Potentiometric Surface Map - 10-2-01

Drawn by: KGF/WJB/CLS	Client: BCEHD	
Date : November 2001	Figure: 2	Project: 99-01-1187

TABLE 1
Phil's Auto • 701 Isleta
99-01-1183-05 • NMED FACILITY #1537
CURRENT GROUND WATER ANALYSIS RESULTS

		ORGANICS											INORGANICS						INDICATORS		
LOCATION	**DATE SAMPLED**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**MTBE**	**EDB**	**EDC**	**TMB**	**NAPHTHALENE**	**1-METHYL NAPHTHALENE**	**2-METHYL NAPHTHALENE**	**IRON**	**PHOSPHATE**	**SULFIDE**	**ALKALINITY as CaCO.**	**DISS O2**	**NITRATE**	**pH**	**CONDUCTIVITY**	**TEMP**
UNITS		**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**ug/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**		**µmhos/cm**	**˚C**
STANDARDS		**10**	**750**	**750**	**620**	**100**	**0.1**	**10**		**30**			**1.0**					**10**			
MW-A	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0	**1.5**	1.5	< 1.0	175	0.01	2.5	7.79	813	24.4
MW-1	10/2/01	< 1.0	3.7	150	354	< 1.0	< 1.0	< 1.0	176	**55**	**11**	**15**	< 1.0	1.0	< 1.0	200	0.01	1.0	7.84	771	22.9
MW-2	10/2/01	< 1.0	< 1.0	43	44.4	< 1.0	< 1.0	< 1.0	86	26	< 5.0	< 5.0	< 1.0	1.0	< 1.0	200	0.01	2.3	7.89	910	22.2
MW-3	10/2/01	< 1.0	< 1.0	97	196	< 1.0	< 1.0	< 1.0	214	**71**	**10**	**13**	**2.0**	1.0	< 1.0	200	0.02	1.0	7.88	885	23.2
MW-4	10/2/01	< 1.0	< 1.0	92	184	< 1.0	< 1.0	< 1.0	202	**62**	**7.3**	**10**	**2.0**	1.0	< 1.0	200	0.02	1.0	7.83	931	24.9
MW-5	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0	**2.5**	1.0	< 1.0	225	0.01	1.0	7.86	780	24.2
MW-9	10/3/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0	**1.0**	1.0	< 1.0	150	0.01	1.0	8.00	1046	20.8
MW-10	10/3/01	< 1.0	< 1.0	4.1	< 2.0	< 1.0	< 1.0	< 1.0	150	3.6	26	< 5.0	**1.5**	1.5	< 1.0	130	0.01	2.5	7.95	1085	21.2
FTW-1	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0	**1.0**	1.0	< 1.0	150	0.01	2.5	7.87	900	23.2
FTW-2	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0	**1.0**	2.0	< 1.0	200	0.01	4.0	7.89	828	22.0
FTW-4	10/2/01	< 1.0	< 1.0	1.8	10.8	< 1.0	< 1.0	< 1.0	31.2	7.6	< 5.0	< 5.0	**2.5**	1.5	< 1.0	150	0.05	< 1.0	7.87	798	21.3
FTW-5	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	3.2	< 5.0	< 5.0	**3.0**	1.0	< 1.0	175	0.03	1.0	7.85	828	24.0
FTW-6	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0	**1.5**	2.0	< 1.0	175	0.01	3.0	7.88	940	22.8
TRIP BLANK	10/2-3/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0									

Data checked _____ / _____

TPA
11/21/01

TABLE 2a
Phil's Auto • 701 Isleta
99-01-1183-05 • NMED FACILITY #1537
History of Ground Water Analysis - Organics

		ORGANICS										
LOCATION	**DATE SAMPLED**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**MTBE**	**EDB**	**EDC**	**TMB**	**NAPHTHALENE**	**1-METHYL NAPHTHALENE**	**2-METHYL NAPHTHALENE**
UNITS		**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**ug/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**
STANDARDS		**10**	**750**	**750**	**620**	**100**	**0.1**	**10**		**30**		
MW - A	9/18/00	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	2.8	**9.2**	**16**	**23**
	07/03/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	<0.4**	<0.4**	<0.4**
	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0
MW - 1	9/18/00	< 5.0	7.2	120	248	< 5.0	< 5.0	< 5.0	134	**35**	*	*
	05/25/01	< 1.0	3.0	75	156	< 1.0	< 1.0	< 1.0	66	**18**	**9.5**	**8.5**
	07/03/01	< 5.0	< 5.0	58	37.8	< 5.0	< 5.0	< 5.0	27.8	7.8	< 25	< 25
	10/2/01	< 1.0	3.7	150	354	< 1.0	< 1.0	< 1.0	176	**55**	**11**	**15**
MW - 2	9/18/00	< 1.0	< 1.0	42	74	< 1.0	< 1.0	< 1.0	84	25	*	*
	05/25/01	< 1.0	< 1.0	22	58.7	< 1.0	< 1.0	< 1.0	61	15	< 5.0	< 5.0
	07/03/01	< 1.0	< 1.0	27	19.2	< 1.0	< 1.0	< 1.0	36	11	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	43	44.4	< 1.0	< 1.0	< 1.0	86	26	< 5.0	< 5.0
MW - 3	9/18/00	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	*	*
	05/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	1.8	< 5.0	< 5.0
	07/03/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	97	196	< 1.0	< 1.0	< 1.0	214	**71**	**10**	**13**
MW - 4	9/18/00	< 1.0	< 1.0	11	< 8.0	< 1.0	< 1.0	< 1.0	15.5	3.6	*	*
	5/25/01	<1.0	1.5	41	26	<1.0	<1.0	<1.0	37.7	15	<5.0	<5.0
	07/03/01	< 1.0	< 1.0	60	6.3	< 1.0	< 1.0	< 1.0	39.1	21	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	92	184	< 1.0	< 1.0	< 1.0	202	**62**	**7.3**	**10**
MW - 5	9/18/00	< 1.0	< 1.0	3.2	< 2.0	< 1.0	< 1.0	< 1.0	< 2.7	2.8	*	*
	5/25/01	< 1.0	< 1.0	1.9	< 2.0	< 1.0	< 1.0	< 1.0	2.4^	<1.0	< 5.0	< 5.0
	07/03/01	< 1.0	< 1.0	8.9	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	5.4	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0
MW - 9	9/18/00	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	<1.0	< 5.0	< 5.0
	07/03/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0
	10/3/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0

FEI/TPA
11/21/01

TABLE 2a
Phil's Auto • 701 Isleta
99-01-1183-05 • NMED FACILITY #1537
History of Ground Water Analysis - Organics

LOCATION	DATE SAMPLED	ORGANICS										
		Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	EDB	EDC	TMB	NAPHTHALENE	1-METHYL NAPHTHALENE	2-METHYL NAPHTHALENE
UNITS		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	ug/l	µg/l	µg/l	µg/l	µg/l
STANDARDS		10	750	750	620	100	0.1	10		30		
MW - 10	9/18/00	< 5.0	< 5.0	18	< 10	< 5.0	< 5.0	< 5.0	318	12	*	*
	5/25/01	<5.0	<5.0	26	<10.0	<5.0	<5.0	<5.0	529	**11**	**45**	**<25**
	07/03/01	< 1.0	< 1.0	8.5	2.6	< 1.0	< 1.0	< 1.0	279	3.4	23	< 5.0
	10/3/01	< 1.0	< 1.0	4.1	< 2.0	< 1.0	< 1.0	< 1.0	150	3.6	26	< 5.0
FTW-1	1/30/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01	< 1.0	< 2.0	< 1.0	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	2.2	<1.0	< 5.0	< 5.0
	07/03/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0
FTW-2	1/30/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01	< 1.0	< 2.0	< 1.0	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	<2.0	<1.0	< 5.0	< 5.0
	07/03/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0
FTW-4	2/16/01	1.1	< 1.0	9.3	3.5	< 1.0	< 1.0	< 1.0	< 2.9	1.6	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	<2.0	<1.0	< 5.0	< 5.0
	07/03/01	< 1.0	< 1.0	3.6	< 2.0	< 1.0	< 1.0	< 1.0	2.8	5.0	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	1.8	10.8	< 1.0	< 1.0	< 1.0	31.2	7.6	< 5.0	< 5.0
FTW-5	1/30/01	< 1.0	< 1.0	4.8	< 2.5	< 1.0	< 0.01	< 1.0	32.5	6.5	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	2.1	1.4	< 5.0	< 5.0
	07/03/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	3.2	< 5.0	< 5.0
FTW-6	1/30/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01	< 1.0	< 2.0	< 1.0	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	<2.0	<1.0	<5.0	< 5.0
	07/03/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	<0.4**	<0.4**	<0.4**
	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0

* - Not Sampled

** - Results Using EPA Method 8270 SIMS

Data checked _____ / _____

FEI/TPA
11/21/01

TABLE 2b
Phil's Auto • 701 Isleta
99-01-1183-05 • NMED FACILITY #1537
History of Ground Water Field Testing - Inorganics

		INORGANICS									INDICATORS		
LOCATION	**DATE SAMPLED**	**IRON**		**PHOSPHATE**	**SULFIDE**	**SULFATE (Lab)**	**ALKALINITY as CaCO.**	**DISS O2**		**NITRATE**	**pH**	**CONDUCTIVITY**	**TEMP**
UNITS		**mg/l**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**		**µmhos/cm**	**˚C**
STANDARDS		**SOLUBLE**	**TOTAL-1.0**					**METER**	**FIELD**	**10**			
MW - A	9/18/00	0.4	0.4	1.0	0.0	*	250	*	0.5	0.8	6.63	936	26.3
	5/25/01	*	0.8	2.0	0.0	*	195	*	1.0	1.5	6.68	886	21.5
	7/3/01	*	**2.0**	3.0	0.0	*	195	*	1.0	1.5	6.80	886	24.5
	10/2/01	*	**1.5**	1.5	< 1.0	*	175	*	0.01	2.5	7.79	813	24.4
MW - 1	9/18/00	0.6	0.8	1.0	1.0	*	325	*	0.5	0.2	6.94	943	23.4
	5/25/01	*	0.4	2.0	0.2	*	250	*	1.0	1.5	6.75	813	21.2
	7/3/01	*	0.6	2.0	0.0	*	175	*	1.0	1.5	6.84	845	22.6
	10/2/01	*	< 1.0	1.0	< 1.0	*	200	*	0.01	1.0	7.84	771	22.9
MW - 2	9/18/00	0.3	0.4	0.8	1.0	*	250	*	1.0	0.6	6.99	1002	23.2
	5/25/01	*	0.4	3.0	0.0	*	300	*	2.0	1.0	6.80	967	20.2
	7/3/01	*	0.2	2.0	0.0	*	175	*	0.5	1.0	6.87	1015	22.0
	10/2/01	*	< 1.0	1.0	< 1.0	*	200	*	0.01	2.3	7.89	910	22.2
MW - 3	9/18/00	0.1	0.6	0.4	0.0	*	225	*	2.0	0.2	6.87	841	21.6
	5/25/01	*	**3.0**	3.0	0.0	*	225	*	2.0	1.0	6.83	771	21.2
	7/3/01	*	0.6	2.0	0.0	*	175	*	0.0	1.0	6.65	881	20.7
	10/2/01	*	**2.0**	1.0	< 1.0	*	200	*	0.02	1.0	7.88	885	23.2
MW - 4	9/18/00	2.0	**2.0**	1.0	0.1	*	250	*	1.0	0.2	6.88	961	24.6
	5/25/01	*	**4.0**	3.0	0.0	*	250	*	2.0	0.4	6.73	977	22.2
	7/3/01	*	**3.0**	4.0	0.0	*	200	*	0.5	1.0	6.69	1054	21.8
	10/2/01	*	**2.0**	1.0	< 1.0	*	200	*	0.02	1.0	7.83	931	24.9
MW - 5	9/18/00	1.0	**1.5**	1.5	0.0	*	250	*	0.5	0.4	6.88	958	24.3
	5/25/01	*	**3.0**	2.0	0.0	*	250	*	2.0	0.6	6.77	836	21.3
	7/3/01	*	**2.0**	2.0	0.0	*	250	*	0.0	1.0	6.79	883	21.9
	10/2/01	*	**2.5**	1.0	< 1.0	*	225	*	0.01	1.0	7.86	780	24.2
MW - 9	9/18/00	0.0	0.1	5.0	0.0	*	250	*	2.0	1.5	6.67	1160	20.8
	5/25/01	*	0.1	5.0	0.0	*	295	*	2.0	1.5	6.80	994	21.3
	7/3/01	*	0.1	6.0	0.0	*	195	*	0.5	1.0	6.77	1096	19.5
	10/3/01	*	**1.0**	1.0	< 1.0	*	150	*	0.01	1.0	8.00	1046	20.8

FEI/TPA
11/21/01

TABLE 2b
Phil's Auto • 701 Isleta
99-01-1183-05 • NMED FACILITY #1537
History of Ground Water Field Testing - Inorganics

		INORGANICS									INDICATORS		
LOCATION	**DATE SAMPLED**	**IRON**		**PHOSPHATE**	**SULFIDE**	**SULFATE (Lab)**	**ALKALINITY as CaCO.**	**DISS O2**		**NITRATE**	**pH**	**CONDUCTIVITY**	**TEMP**
UNITS		**mg/l**		**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**mg/l**		**µmhos/cm**	**˚C**
STANDARDS		**SOLUBLE**	**TOTAL-1.0**					**METER**	**FIELD**	**10**			
MW - 10	9/18/00	0.8	**1.0**	2.0	0.2	*	350	*	1.0	0.4	7.10	1375	22.0
	5/25/01	*	0.8	5.0	0.0	*	350	*	1.0	0.8	6.74	1035	19.7
	7/3/01	*	0.8	4.0	0.0	*	300	*	0.5	1.0	6.89	1075	19.6
	10/3/01	*	**1.5**	1.5	< 1.0	*	130	*	0.01	2.5	7.95	1085	21.2
FTW-1	1/30/01	1.0	**2.0**	0.2	0.1	*	300	0.54	2.0	0.6	7.32	1047	16.2
	5/25/01	*	**4.0**	2.0	0.0	*	250	*	1.0	1.0	6.62	979	20.8
	7/3/01	*	0.6	3.0	0.0	*	250	*	1.0	1.5	6.91	1035	23.5
	10/2/01	*	**1.0**	1.0	< 1.0	*	150	*	0.01	2.5	7.87	900	23.2
FTW-2	1/30/01	1.0	**5.0**	1.5	0.8	*	300	1.59	2.0	1.5	7.44	857	15.1
	5/25/01	*	0.0	3.0	0.0	*	250	*	0.5	2.0	6.74	812	20.3
	7/3/01	*	**1.5**	3.0	0.0	*	200	*	1.0	1.5	6.73	926	21.8
	10/2/01	*	**1.0**	2.0	< 1.0	*	200	*	0.01	4.0	7.89	828	22.0
FTW-4	2/16/01	1.6	*	< 0.05	*	88.0	390	0.49	*	< 0.10	7.47	794	16.5
	5/25/01	*	**2.0**	3.0	0.0	*	250	*	0.0	0.5	6.75	825	20.4
	7/3/01	*	**2.0**	4.0	0.0	*	250	*	0.5	1.0	6.73	877	20.4
	10/2/01	*	**2.5**	1.5	< 1.0	*	150	*	0.05	< 1.0	7.87	798	21.3
FTW-5	1/30/01	3.0	**4.0**	0.2	5.0	*	350	0.82	0.5	0.6	7.33	899	17.4
	5/25/01	*	**3.0**	1.5	0.0	*	350	*	1.0	1.0	6.74	871	21.7
	7/3/01	*	**2.0**	3.0	0.0	*	250	*	0.5	1.0	6.72	906	22.0
	10/2/01	*	**3.0**	1.0	< 1.0	*	175	*	0.03	1.0	7.85	828	24.0
FTW-6	1/30/01	0.2	0.6	1.0	0.2	*	175	1.26	1.0	1.5	7.31	91.6	14.8
	5/25/01	*	0.3	2.0	0.0	*	295	*	0.5	1.5	6.79	898	19.5
	7/3/01	*	0.4	3.0	0.0	*	250	*	2.0	1.5	6.79	942	20.9
	10/2/01	*	**1.5**	2.0	< 1.0	*	175	*	0.01	3.0	7.88	940	22.8

* - Not Sampled

Data checked _____ / _____

FEI/TPA
11/21/01

TABLE 3
Phil's Auto • 701 Isleta
99-01-1183-05 • NMED FACILITY #1537
Summary of Ground Water Elevation Measurements

WELL NUMBER	ELEVATION (well casing datum)	DATE	STATIC (feet BG)	WATER LEVEL (above datum)	(+) = RISING (-) = FALLING
MW-A	4944.5	9/14/00	11.73	4932.77	
		5/25/01	11.30	4933.20	0.43
		7/3/01	11.66	4932.84	-0.36
		10/2/01	11.53	4932.97	0.13
MW-1	4944.58	9/14/00	11.84	4932.74	
		5/25/01	11.41	4933.17	0.43
		7/3/01	11.78	4932.80	-0.37
		10/2/01	11.66	4932.92	0.12
MW-2	4945.08	9/14/00	12.33	4932.75	
		5/25/01	11.91	4933.17	0.42
		7/3/01	12.27	4932.81	-0.36
		10/2/01	12.16	4932.92	0.11
MW-3	4945.33	9/14/00	12.64	4932.69	
		5/25/01	12.20	4933.13	0.44
		7/3/01	12.58	4932.75	-0.38
		10/2/01	12.47	4932.86	0.11
MW-4	4945.06	9/14/00	12.37	4932.69	
		5/25/01	11.93	4933.13	0.44
		7/3/01	12.31	4932.75	-0.38
		10/2/01	12.19	4932.87	0.12
MW-5	4944.38	9/13/00	11.69	4932.69	
		5/25/01	11.26	4933.12	0.43
		7/3/01	11.64	4932.74	-0.38
		10/2/01	11.52	4932.86	0.12
MW-9	4943.55	9/14/00	10.86	4932.69	
		5/25/01	10.43	4933.12	0.43
		7/3/01	10.82	4932.73	-0.39
		10/3/01	10.68	4932.87	0.14
MW-10	4943.85	9/14/00	11.18	4932.67	
		5/25/01	10.72	4933.13	0.46
		7/3/01	11.11	4932.74	-0.39
		10/3/01	11.15	4932.70	-0.04
FTW-1	4944.45	5/25/01	11.25	4933.20	
		7/3/01	11.62	4932.83	-0.37
		10/2/01	11.50	4932.95	0.12

TABLE 3
Phil's Auto • 701 Isleta
99-01-1183-05 • NMED FACILITY #1537
Summary of Ground Water Elevation Measurements

WELL NUMBER	ELEVATION (well casing datum)	DATE	STATIC (feet BG)	WATER LEVEL (above datum)	(+) = RISING (-) = FALLING
FTW-2	4945.08	5/25/01	11.87	4933.21	
		7/3/01	12.25	4932.83	-0.38
		10/2/01	12.14	4932.94	0.11
FTW-4	4943.98	5/25/01	10.90	4933.08	
		7/3/01	11.26	4932.72	-0.36
		10/2/01	11.14	4932.84	0.12
FTW-5	4944.02	5/25/01	10.92	4934.16	
		7/3/01	11.30	4933.78	-0.38
		10/2/01	11.18	4932.84	0.12
FTW-6	4944.59	5/25/01	11.38	4932.60	
		7/3/01	11.75	4932.23	-0.37
		10/2/01	11.64	4932.95	0.11

Data checked _____ / _____

Table 4
Phil's Auto • 701 Isleta
99-01-1183-05 • NMED Facility # 1537
Summary of Tasks Performed in the Field

DATE	FIELD TECH.	DESCRIPTION
9/18/00	KGF, MB	Initial sampling round(1st Qtr)-all existing monitoring wells, site survey.
10/13/00	BB, TC	Drilling on site(Tecumseh)
10/16/00	BB, TC	Drilling on site(Tecumseh)
12/5/00 & 12/6/00	BB, TC	Drilling on site(Tecumseh)
1/30/01	MB, TC	Developing and sampling new wells(Faith/Tecumseh)
2/2/01	BB, TC	Drilling on site(Tecumseh)
5/25/01	MB, KL	2nd Qtrly sampling round, all 13 monitoring wells.
7/3/01	MB, KL	3rd Qtrly sampling round, all 13 monitoring wells.
10/2-3/01	PJB	4th Qtrly sampling round, all 13 monitoring wells.

Data checked _____ / _____

APPENDIX 1

Sampling Protocol

Prior to any sampling, the water level in each monitoring well was measured. Ground water elevations (from datum) were determined using survey data collected during the Hydrogeologic Investigation. Temperature, pH and conductivity measurements were taken during well purging to document well stabilization. At least three (3) well bore volumes were removed from each well prior to collection of ground water samples using dedicated disposable bailers. Samples were collected using strict chain-of-custody procedures, stored on ice in a cooler, and hand-delivered to Pinnacle Laboratories in Albuquerque, New Mexico, for analyses. The ground water samples were analyzed for Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX), Methyl-t-Butyl Ether (MTBE), Tri-Methyl Benzenes (TMBs), Ethylene Dibromide (EDB), Ethylene Dichloride (EDC), Naphthalene, 1-Methylnaphthalene and 2-Methylnaphthalene by EPA Method 8260. Natural attenuation indicator parameters iron, phosphate, nitrate, sulfide, alkalinity, pH, dissolved oxygen, conductivity and temperature were analyzed and measured in the field using the appropriate field test kits and equipment.

APPENDIX 2

Field Notes

APPENDIX 3

Analytical Laboratory Reports